REGULATORY INFORMATION CONFERENCE 2000

BREAKOUT SESSION ON CONTROL ROOM HABITABILITY

BACKGROUND

I. CONTROL ROOM HABITABILITY REGULATORY REQUIREMENTS

A. Explicit

- 1. Commitments to Draft GDCs
 - 2. 10 CFR Part 50, Appendix A, Criterion 19
 - 3. TMI Action Item III.D.3.4 (NUREG-0737)

B. Implicit

- 1. 10 CFR 50.36 Technical Specifications
- 2. 10 CFR Part 50, Appendix A, Criterion 3 Fire Protection
- 3. 10 CFR 50.48 Fire Protection
- 4. 10 CFR Part 50, Appendix R Fire Protection

II. GDC 19 REQUIREMENTS

- A. Facility for operator actions under normal & accident conditions.
- B. Adequate radiation protection (5 rem whole body or its equivalent)
- C. Remote shutdown facilities outside control room

III. NON-SHUTDOWN ASPECTS OF CONTROL ROOM HABITABILITY

- A. Limit Control Room Envelope Inleakage
- B. Provide Adequate Filtration and Adsorption of non-Noble Gas Isotopes
- C. Protect against Toxic Gases
- D. Adequate Radiation Shielding & Limited Exposure to Noble Gases

IV CONTROL ROOM HABITABILITY AS AN ISSUE

- A. ACRS Concerns (Early 1980's)
- B. Control Room Habitability Survey (1984-1987)
 - NUREG/CR-4191
 - NUREG/CR-4960
- C. Inadequate III.D.3.4 Submittals
- D. Inadequate III.D.3.4 Reviews by the Staff
- E. TMI III.D.3.4 Remnants
- F. Tracer Gas Testing Results (1992-2000)
- G. Licensing
 - Inadequate Licensee Submittals involving amendments associated with Steam Generators Replacement, Steam Generator Alternate Repair Criteria, and Power Uprates
 - 2. Unrealistic Inleakage Values for Control Room Envelope
 - 3. Analysis assumes System Response Inconsistent with Plant's Capability
 - 4. Limiting Accident not Analyzed
- H. Licensee & Inspector Identified Issues

VIII. CONTROL ROOM HABITABILITY AS AN INDUSTRY INITIATIVE

- A. February 1998 Meeting with Executive Team
- B. NRC/NHUG/NEI Workshop July 1998
- C. NEI Control Room Habitability Task Force
- D. Draft NEI 99-03 (August 1999)
- E. ACRS Meetings (7/99 & 9/99)
- F. Task Force Subgroups Created January 2000

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